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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,688	02/03/2005	Shuichi Matsumura	122627	8515

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P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

LILLING, HERBERT J

ART UNIT	PAPER NUMBER
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1657

MAIL DATE	DELIVERY MODE
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05/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,688

Applicant(s)

MATSUMURA, SHUICHI

Examiner

HERBERT J. LILLING

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2007 and February 03, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,6-8 and 10-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 3-4,6-8 and 10-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>February 03, 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

1. Receipt is acknowledged of the election response filed March 23, 2007.
2. Claims 1-20 remain pending in this application.
3. Applicant has elected with traverse Group I claims and species which read on Claims 1, 5 and 9. Claim 2 has been examined along with the elected claims. Claims 3, 4, 6-8 and 10-20 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions or species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on March 23, 2007.

The traversal arguments have been deemed not to be persuasive in view of the previous office action, which stated:

“Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-10, drawn to a depolymerizing process of polylactic acid, wherein the polylactic acid is depolymerized in the presence of a hydrolase and producing a re-polymerizable oligomer.

Group II, claim(s) 11-20, drawn to a producing process of polylactic acid, wherein an oligomer of lactic acid is polymerized in the presence of a hydrolase.

4. The process of Group I is drawn to a process for the formation of an oligomer which process is distinct from that of Group II process for the formation of a polymer of an oligomer.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions

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have acquired a separate status in the art due to their recognized divergent subject matter which requires totally different computerized search strategies for each of the inventions drawn to different products that are formed, restriction for examination purposes as indicated is proper.

The starting substrates for each of the processes is patently distinct from each other as well as the final product formed from the processes are totally different from each other which inventions or groups of inventions are not so linked as to form a single general inventive concept under PCT Rule 13.1."

It is immaterial how the oligomers are prepared for the polymerization to the polylactic acids, which does not require the steps since oligomers are known to be polymerized which includes catalysts. The processes are not so linked to from a single general inventive concept since Invention I is drawn to a depolymerization and Invention II is drawn to a different concept to prepare polymers.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 5 and 9 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the processes as disclosed in the specification to form oligomers, does not reasonably provide enablement for the broad claimed processes since the prior art teaches the same steps, e.g., Williams Reference 9; Mauduit et al or Sakai et al which references degrades or depolymerizes the polymers. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and practice the invention commensurate in scope with these claims without additional essential steps or components to provide the essential enabling steps or components for the preparation of oligomers.

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reference 3.

Upon receipt of an English translation, the rejection will be withdrawn and at least claim 3 will be considered to be allowable subject matter. All claims dependent upon the allowable subject matter for this elected invention will be allowed if the allowable subject is in an independent claim.

6. **No claim is allowed.**

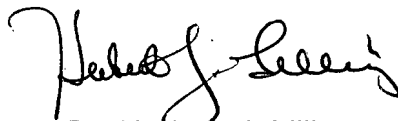
7. It is kindly requested that Applicant amend claim 1, cancel claims 2 and 10-20 for expedited process for allowing this application.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lilling whose telephone number is 571-272-0918 and Fax Number is **571-273-8300**. or SPE Jon Weber whose telephone number is 571-272-0925. Examiner can be reached Monday-Friday from about 7:30 A.M. to about 7:00 P.M. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

H.J.Lilling: HJL
(571) 272-0918
Art Unit 1657
May 03, 2007

A handwritten signature in black ink, appearing to read "Herbert J. Lilling", written in a cursive style.

Dr. Herbert J. Lilling
Primary Examiner
Group 1600 Art Unit 1657